



*The relationships between soils, landscapes, regional geology, and parent material*

# Soil Catenas of Connecticut

For natural resource information, please contact:

Connecticut Geological Survey, Office of Information Management  
Connecticut Department of Energy and Environmental Protection  
79 Elm Street, Hartford, CT 06106  
(860) 424-3540

For soil survey information, technical soil services, and natural resources conservation programs, contact:

USDA, Natural Resources Conservation Service  
334 Merrow Road, Suite A, Tolland, CT 06084  
(860) 871-4011  
[www.ct.nrcs.usda.gov](http://www.ct.nrcs.usda.gov)

**Soil Survey of the State of Connecticut**  
The Soil Survey of the State of Connecticut is a modern soil survey, unifying the separate eight county soil legends to a single statewide legend, incorporating current soil taxonomy and standards, addressing land use changes and urbanization, and compiled onto planimetric orthophoto base. The soils were mapped at a scale of 1:12000 with a minimum size delineation of approximately 3 acres. Copies of the published county soil survey reports dated prior to July 2005 are no longer the official soil survey information and should only be used as historical reference.

## The Web Soil Survey

Official digital soil survey information is located on the Web Soil Survey at <http://websoilsurvey.nrcs.usda.gov>. It is a simple yet powerful way to access and use soil data. The site is updated and maintained online as the single authoritative source of soil survey information.



## The simple yet powerful way to access and use soil data.

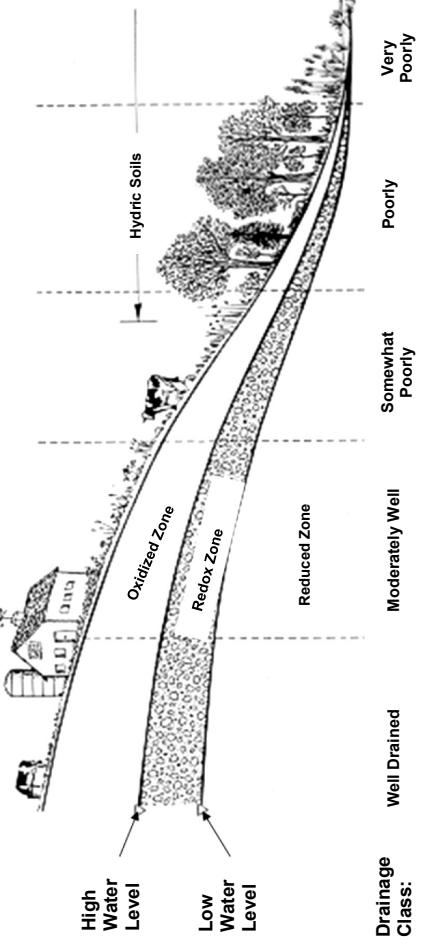


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- The black diagram on the front page shows a drainage sequence in which wetness increases at lower elevations on the landscape.
- The diagram above shows a drainage sequence in which wetness increases at lower elevations of drumlins.

## Soil Catena Chart

Related soils of about the same age, derived from similar parent material and occurring under similar climatic conditions, can be arranged into a sequence of increasing wetness. This sequence is called a **soil catena**. A catena chart is useful in identifying the relationships of one series to another.

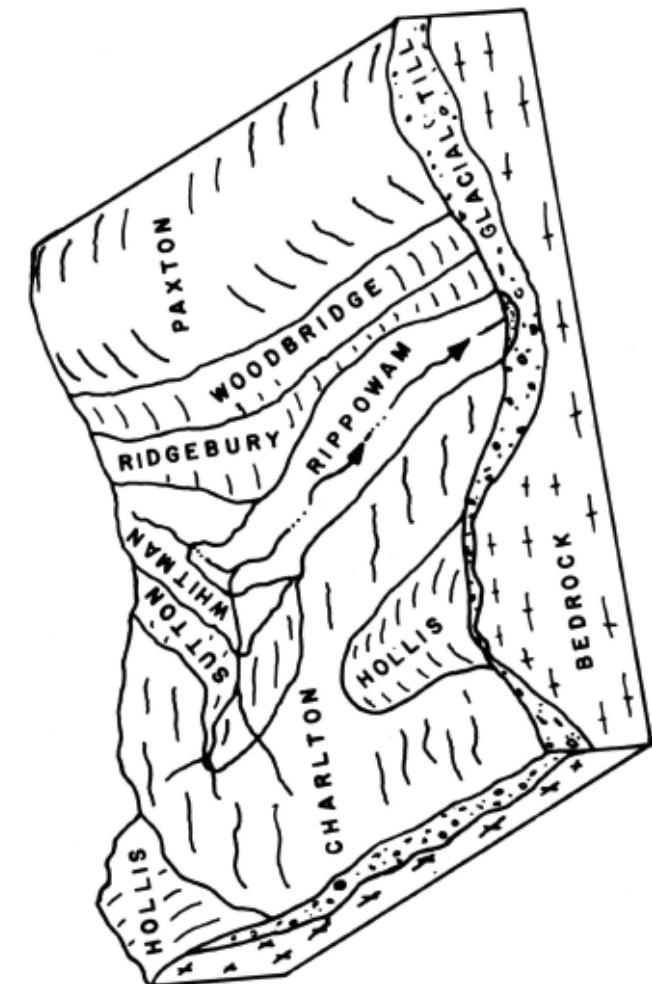


**Soil Series**  
There are 112 major types of soils in Connecticut identified and named. Each type (or series) is named for the geographical area where it was first described. Each soil series has specific relationships to landscapes, regional geology, and parent materials.

The chart assesses the catena concept by matching parent material, geology, and drainage for each series mapped in the Soil Survey of the State of Connecticut. Each horizon is in turn, arranged sequentially soil catena and subsoil series that have been mapped in the Soil Survey. This sequence is useful in identifying the relationships of one series to another.

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Organic deposits and subsoil series that have been mapped in the State of Connecticut. Each horizon and each catena is, in turn, arranged vertically by differences in subsoil depth, soil texture, and soil parent material. There are very poorly drained soil series that have been mapped in the State of Connecticut. This sequence is useful in identifying the relationships of one series to another.



## SOIL CATENAS OF CONNECTICUT

DEPOSIT	LITHOLOGY	TEXTURE GROUP	SOIL DRAINAGE CLASS							
			Excessively	Somewhat Excessively	Well Drained	Moderately Well	Somewhat Poorly	Poorly		
GLACIAL TILL Unstratified Sand, Silt & Rock	GRANITE & SCHIST	SANDY	LOAMY	GLOUCESTER	LEICESTER	LOONMEADOW #	+ WHITMAN	ALDEN <sup>19</sup>		
	SCHIST, GRANITE & GNEISS			* WESTMINSTER #						
				** MILLSITE #						
	MIXED CARBONATE ROCKS & CRYSTALLINE ROCKS			* HOLLIS <sup>28</sup>						
				** CHATFIELD						
	RED SANDSTONE, SHALE, CONGLOMERATE & BASALT			CHARLTON CANTON	SUTTON <sup>1</sup>					
				BICE #	SCHROON #					
	BROWN MICACEOUS SCHIST			+ PAXTON + MONTAUK + SHELBURNE #	+ WOODBRIDGE + ASHFIELD #					
				* FARMINGTON						
	PHYLLITE, SCHIST & SLATE			PYRITIES # STOCKBRIDGE NELLIS <sup>11</sup>	+ HOGANSBURG # GEORGIA AMENIA					
				* HOLYOKE <sup>29</sup>						
GLACIOFLUVIAL Stratified Sand & Gravel	ACIDIC CRYSTALLINE ROCKS (granite, gneiss and schist)	SILTY / SANDY	MERRIMAC	** YALESVILLE	+ BRAYTON #	+ MENLO	WALPOLE MOOSILAUKE #	SCARBORO <sup>15, 32</sup>		
		SANDY & GRAVELLY		CHESHIRE <sup>24, 29</sup>						
		SANDY		+ WETHERSFIELD						
		LOAMY / SAND & GRAVEL		* BRIMFIELD						
		SILTY / SAND & GRAVEL		** MACOMBER #						
	ACIDIC, RED SANDSTONE, SHALE, CONGLOMERATE	SANDY & GRAVELLY		+ BERNARDSTON						
		SANDY		+ LANESBORO #						
		LOAMY / SAND & GRAVEL		DUMMERSTON #						
		SANDY & GRAVELLY		+ BROADBROOK						
		LOAMY / SAND & GRAVEL		NARRAGANSETT						
GLACIOLACUSTRINE Stratified Sand, Silt & Clay	MIXED CRYSTALLINE & SEDIMENTARY ROCKS	SILTY	COPAKE	SUDBURY	RAYPOL	FREDON	HALSEY <sup>7</sup>			
		LOAMY / CLAYEY		DEERFIELD						
		SILTY & CLAYEY		AGAWAM						
				ENFIELD <sup>16</sup>						
ALLUVIAL Stratified Sand & Silt	GNEISS, SCHIST, GRANITE & QUARTZITE	SANDY	HERO	HAVEN	ELLINGTON	RAYNHAM <sup>31</sup>	SCARBORO <sup>15, 32</sup>			
		LOAMY		BRANFORD						
		SILTY		COPAKE						
				HERO						
ORGANIC Peat & Muck	FRESHWATER (INLAND)	SANDY	SUNCOOK	BELGRADE <sup>27</sup>	RUMNEY # RIPPOWAM	SCITICO <sup>26</sup>	MAYBID <sup>5, 33</sup>			
		LOAMY		ELMRIDGE <sup>13, 21</sup>						
		SILTY		BRANCROFT <sup>9</sup>						
				BERLIN						
	MIXED CRYSTALLINE & SEDIMENTARY ROCKS	SANDY	HADLEY <sup>14</sup>	POOTATUCK <sup>23</sup>	LIMERICK LIM	MEDOMAK # SACO				
		LOAMY		ONDAWA # OCCUM <sup>4</sup>						
		SILTY		WINOOSKI <sup>12</sup>						
				BASH <sup>8, 25</sup>						
	SALT AND BRACKISH (TIDAL)	FIBERS	THICKNESS	SUBSTRATE	SOIL SERIES	PARENT MATERIAL	HIGHLY FLUID SURFACE	NOT SULFIDIC	SULFIDIC	
		FEW	>51" (>130 cm)	VARIABLE	CATDEN <sup>10</sup> FREETOWN BUCKSPORT #					
			16-51" (40-130 cm)	LOAMY	NATCHAUG <sup>22</sup>		0-4" (0-10 cm)	RHODESFOLLY		
		COMMON	16-51" (40-130 cm)	LOAMY	WONSQUEAK #		4-20" (10-50 cm)	MARSHNECK FORT NECK PISHAGQUA WEQUETEQUOCK		
				SANDY	TIMAKWA <sup>2</sup>		>39" (>100 cm)			
					PAWCATUCK					
	SUBAQUEOUS Salt & Brackish Waters ++			VARIABLE	WESTBROOK IPSWICH	SUBMERGED TERRESTRIAL	0-4" (0-10 cm)	NAPATREE	ANGUILLA	
							>4" (>10 cm)		BILLINGTON	

+ Indicates soils underlain by compact till.  
 \* Indicates shallow soils less than 20 inches (< 50 cm) to bedrock.  
 \*\* Indicates moderately deep soils 20 to 40 inches (50-100 cm) to bedrock.  
 # Indicates soils with mean annual soil temperature less than 8°C or 46.4°F (elevations of >1,300 feet/396 meters in Litchfield County) in frigid soils.  
 ++ Coastal subaqueous soils are covered with saline water for more than 21 hours per day.

1-33 Annotations to referenced soil series no longer used in CT.

SOIL SERIES NO LONGER USED IN CONNECTICUT			
1. Acton	9. Buxton	17. Jaffrey	26. Scantic
2. Adrian	10. Carlisle	18. Kendaiia	27. Scio
3. Au Gres	11. Dover	19. Lyons	28. Shapleigh
4. Bermudian	12. Eel	20. Massena	29. Sunderland
5. Biddeford	13. Elmwood	21. Melrose	30. Swanton
6. Birchwood	14. Genesse	22. Palms	31. Wallington
7. Birdsall	15. Granby	23. Poquonock	32. Wareham
8. Bowmansville	16. Hartland	25. Rowland	33. Whately

### Historical Soil Series

Since the publication of the soil surveys for all eight Connecticut counties, the classification of soils has continued to evolve. When using the historical published soil surveys, one will encounter a variety of soil series names not currently in use. These series, noted above, are referenced by number to the most current name available at the time of this publication. For example, the soil mapped as *Acton*, if classified by today's standards, may be named *Sutton*.

Charts on this page supplement all Connecticut soil surveys by referring to both current and previously used soil series names. However, since there are some major differences in map units and soil series interpretations from survey to survey, it is necessary to refer to the narrative descriptions within the appropriate archived survey to obtain complete information concerning a particular soil.

### Official Soil Series Descriptions

More detailed information about each soil series is located on the USDA-NRCS soils webpage under Official Soil Series Descriptions (OSDs). This site is updated and maintained online as the official source of tentative and established soil series.